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2. (Twice Amended) The apparatus of claim 1 wherein said profile parser provides as output a term dictionary containing the query terms from the parsed user query, and wherein the document parser uses said term dictionary to eliminate terms from said inverted list.

7. (Twice Amended) A method for filtering incoming documents, the method comprising the steps of:

(a) receiving an incoming document and parsing it to produce an inverted list of terms contained in incoming document;

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(b) receiving one or more user queries and parsing same into query nets comprised of query terms and operators;

(c) using the produced inverted list to retrieve the query nets representing user queries by using recursive statistical inference in which numerical weights assigned respectively to the query terms are combined as dictated by the query operators and in which evaluation of one level of a query tree pauses while evaluation of another lower level proceeds;

(d) discarding retrieved query nets matching less than a predetermined number of terms;

(e) scoring remaining profile and discarding profiles having a score less than a predetermined threshold.

11.
12. (Twice Amended) An article of manufacture having computer-readable program means for filtering incoming documents, the article comprising:

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(a) computer-readable program means for receiving an incoming document and parsing it to produce an inverted list of terms contained in incoming document;

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(b) computer-readable program means for receiving user queries and parsing the user queries to produce query nets containing query terms and query operators representing the queries;

(c) computer-readable program means for using the produced inverted list to retrieve query nets representing user queries by using recursive statistical inference in which numerical weights assigned respectively to the query terms are combined as

dictated by the query operators and in which evaluation of one level of a query tree pauses while evaluation of another lower level proceeds;

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(d) computer-readable program means for discarding retrieved query nets matching less than a predetermined number of terms;

(e) computer-readable program means for scoring remaining profile and discarding profiles having a score less than a predetermined threshold.

[Please add new claims as follows:

15.
--17. An apparatus for filtering documents as received, the apparatus comprising:

a profile parser, the profile parser accepting at least one structured query comprised of terms and operators as input and providing as output a query net representing a parsing of the at least one query;

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a document parser, said document parser accepting a document as input as it is received and providing an inverted list of terms contained in the document as output; and

a recursive statistical inference comparator that compares the inverted list for the document against the query net using statistical inference weighting for the query terms and providing as output an indication whether the document matches the at least one query,

wherein,

the apparatus is programmed to filter documents using recursive statistical inference in which numerical weights assigned respectively to the query terms are combined as dictated by the query operators and in which evaluation of one level of a query tree pauses while evaluation of another lower level proceeds; and

the apparatus is programmed to count the number of inverted list terms matching the query and to disregard the query if the count falls below a predetermined threshold.

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--18. The apparatus of claim 17 wherein the document parser is configured to generate said inverted list of terms for a document only to an extent dictated by a dictionary file, said dictionary file containing terms in the at least one query net.